### CALFED BAY DELTA PROGRAM MEETING NOTES

#### DELTA DRINKING WATER COUNCIL

December 16, 1999
Resources Building
1416 9<sup>th</sup> Street
Sacramento, CA 95814
(Attendance Roster Attached)

#### TARGETS AND MILESTONES

Steve Ritchie, acting CALFED Executive Director, opened the meeting with a discussion of the CALFED targets and milestones for determining continuous improvement in drinking water. CALFED's drinking water quality goal as defined in the revised Phase II Report of the revised Programmatic EIR/S, June 1999, is to continuously improve source water quality that allows for municipal water suppliers to deliver safe, reliable, and affordable drinking water that meets, and where feasible, is better than the applicable drinking water standards (which are designed to protect public health). The purpose of the targets/milestones discussion was to summarize perspectives, to identify areas of agreement, and to develop steps to address controversies.

It was discussed that the development of the CALFED numerical targets of 50 ug/L bromide and 3 mg/L TOC were driven, in part, by what was known then about regulation development particularly in view of the ozonation treatment technology and the need to control protozoan pathogens, e.g. *Cryptosporidium*. With bromate being the most significant by-product formed, ozone has been determined to be effective in controlling *Cryptosporidium* and taste and odor. Since that time there have been increasing developments concerning other treatment technologies such as ultraviolet disinfection and membrane filtration.

It was pointed out that the CALFED targets for bromide and TOC are "short hand" indicators and that it would be difficult to show improvement just by meeting these two targets. The level of uncertainty of the health effects of disinfectant by-products from high bromide containing water was discussed. It was pointed out by some that the science on risk assessment, as well as contaminant occurrence and treatment technology, was evolving. Some Council members reminded others of the CALFED Bromide Panel Report which indicates that the 50 ug/L bromide level would not likely be reached using waters in the Delta and reliance on this target therefore may predetermine the direction of storage and conveyance decisions. Steve and other Council members discussed that the CALFED Drinking Water Improvement Strategy was designed to implement and/or support a series of actions and studies on source control, monitoring and assessment, health effects, regulatory development, alternative water sources and operations, and treatment technology.

The results from these actions and studies will be used to assess the need for any additional storage and conveyance. Some of the Council members indicated that the most important feature from CALFED's Phase II planning was the development of target levels, in that this gave some assurance to the urban water users that the success or failure of CALFED actions could be adequately tracked.

On the issue of health effects, it was recommended to CALFED that guidance be received from the California Department of Health Services and the United Stated Environmental Protection Agency who are involved in health effects studies and risk assessments.

#### **ISSUE PAPERS**

The issue papers were mailed in advance of the meeting. The intent of the issue papers was to summarize current understanding and highlight key issues associated with the CALFED Water Quality Improvement Strategy action/study areas. The issue papers are also a vehicle to develop recommendations on short and long term actions and studies. Authors of the issue papers were present to answer questions. The Council members chose to concentrate on several issue papers related to issues concerning targets/milestones: Treatment, Health Effects, Regulations and Operations. Some of the Council members noted that a strategy should be developed to prioritize actions and studies. The members generally agreed that there needs to be an approach to quantify and determine the relative benefit/detriments as a result of CALFED actions. Steve mentioned that this same idea was discussed in the recent BDAC meeting. One of the Council members further indicated that cost and feasibility of technology needs to be considered in the approach. Steve indicated that CALFED would be involved in developing this approach in the near future.

It was recommended that the Regulatory Issue Paper be revised with the assistance of US EPA. It was pointed out that both the Source Control Issue Paper and the Regulatory Issue Paper needs to consider the development of Total Maximum Daily Loads (TMDLs). One of the Council members reminded everyone that drinking water contaminants are not regulated in the Basin Plans, however, another commenter indicated that TMDLs do not necessary have to be linked with regulations, as long as they show improvements are being made.

#### EARLY IMPLEMENTATION

Stein Buer gave a short presentation on the CALFED Early Implementation Plan and the funding for fiscal year 2000/2001. He explained the approach to bundle early actions (before the Record of Decision) in the South Delta. He went into further detail on the staff recommendations to allocate \$2.0 million among four drinking water quality actions:

- 1. Assessment of Sources and Magnitudes of Loads of Drinking Water Constituents of Concern (two proposals are planned one for determining baseline conditions and the other for designing and implementing a multi-year monitoring and research program).
- 2. Veale/Byron Tract Drainage Discharge Management
- 3. Bay Area Regional Blending Assessment
- 4. Salt Removal System Pilot Project (San Joaquin River)

One commenter indicated that the North Bay Aqueduct is now being funded by Proposition 204 but that future phases of the project fall under the CALFED Drinking Water Quality Program (it is one of the identified early implementation actions). Future funding considerations will occur for North Bay Aqueduct.

The meeting ended with a comment that source water quality is supposed to get better under the CALFED Program but that everyone is challenged to help CALFED determine what is the best measurement of improvement. The Council members expressed interest in addressing the Drinking Water Quality Operations Studies for the Water Management Strategy Comprehensive Evaluation for the next meeting.

Two meeting dates were proposed for the next Delta Drinking Water Council meeting – January 20 or 27. It was determined that these were dates already checked out with Dave Spath, Chair of the Delta Drinking Water Council. Hearing no objections, the next meeting date was set for January 27, 1999, location to be determined.

### BAY-DELTA ADVISORY COUNCIL DELTA DRINKING WATER COUNCIL DESCRIPTION

#### **Bay-Delta Advisory Council**

The Bay-Delta Advisory Council (BDAC) was chartered as part of the CALFED Bay-Delta Program to provide recommendations to the Secretary of Interior and the Governor of California in developing long-term solutions addressing the underlying causes of problems affecting San Francisco Bay and Sacramento-San Joaquin Delta Estuary values. These values include: protection of water quality, protection of the Bay-Delta Estuary including its fish and wildlife resources, effective planning and operation of water delivery systems, and maintenance of Delta levees and channels.

#### CALFED Bay-Delta Program - Drinking Water Quality

The overall CALFED water quality objective is to provide good water quality for environmental, agricultural, industrial, and recreational beneficial uses, including drinking water. The CALFED drinking water quality objective is to continuously improve source water quality that allows for municipal water suppliers to deliver safe, reliable, and affordable drinking water that reliably meets, and where feasible, exceeds applicable drinking water standards. The CALFED program for improving drinking water quality is to reduce the loads and/or impacts of bromide, total organic carbon, pathogens, nutrients, salinity, and turbidity through a combination of measures including source reduction, alternative sources of water, treatment, and storage and conveyance improvements.

CALFED's specific target for providing safe, reliable, and affordable drinking water in a cost effective way is to achieve either: a) average concentrations at Clifton Court Forebay and other south and central Delta drinking water intakes of 50 ug/L bromide and 3.0 mg/L total organic carbon; or b) an equivalent level of public health protection utilizing a cost effective combination of alternative source waters, source control, and treatment technologies.

#### Delta Drinking Water Council - Need, Mission, Duties

In furtherance of CALFED's drinking water quality objectives, the Delta Drinking Water Council will be formed as a subcommittee of BDAC. The duties of the Delta Drinking Water Council are solely advisory, as outlined below:

**Need -** The derivation of the Delta Drinking Water Council came from many discussions with agencies and stakeholders who commented on the complexity of the drinking water issues, the importance of drinking water concerns, the need to utilize all available drinking water expertise, and the need to provide an official forum for stakeholders and agencies to assist in developing the best set of solutions.

**Mission** - The mission of the Delta Drinking Water Council is to advise the CALFED Program and the CALFED Policy Group through BDAC on necessary adaptations to the

CALFED Drinking Water Improvement Strategy to achieve CALFED's drinking water objectives (see Attachment 1). It is under the scrutiny of the Delta Drinking Water Council that a combination of actions and studies will be developed and performed to drive important decisions on which additional measures or set of measures are most appropriate to meet CALFED's drinking water quality objectives.

#### Duties - The Council will:

- Operate as a BDAC subcommittee to provide advice related to CALFED drinking water quality actions and studies.
- Make recommendations to the CALFED Program, CALFED agencies and BDAC on treatment, health effects, alternative water sources, conveyance improvements, and storage and operations necessary to achieve drinking water quality objectives.
- Recommend milestones as indicators of continuous improvement in drinking water quality.
- Identify monitoring, research and information needs.
- Identify opportunities for beneficial CALFED involvement in source water quality improvement activities.
- Recommend research into human health effects of Delta drinking water supplies.
- Recommend research and development of drinking water treatment technologies to effectively treat Delta water supplies.
- Provide a forum where CALFED can convene scientific experts to provide independent scientific review of drinking water quality elements of the CALFED Program and to provide recommendations for improving the overall success of the Program.
- Advise CALFED on the preparation of reports to the CALFED Policy Group and BDAC which assess:
  - 1. Trends in Delta water quality
  - 2. Progress in source control
  - 3. Trends in treatment technology and regulation
  - 4. Recent findings and summary status of human health effects of disinfection byproducts
  - 5. The ability of treatment, conveyance changes. water exchanges and storage development and operations to achieve progress towards drinking water quality objectives
  - 6. Implemented and proposed Stage 1 water quality actions and their performance in achieving progress towards drinking water quality objectives
  - 7. Adaptive management changes necessary to achieve CALFED drinking water objectives
  - 8. Reevaluation of CALFED's drinking water quality objectives
- Advise CALFED regarding the composition of the expert panels to be convened in 2003 and 2007.

#### CALFED Program Relationship to Delta Drinking Water Council

• The CALFED Program will provide technical and administrative support to the Delta Drinking Water Council to carry out its duties.

- The CALFED Program will regularly evaluate achievement of performance targets or milestones and will present these findings to the Delta Drinking Water Council for its review.
- The CALFED Program will regularly request advice from the Council on the overall direction of the drinking water quality improvement effort and on priorities for CALFED funding.

#### Council Term

As a BDAC subcommittee, the Delta Drinking Water Council's term is concurrent with BDAC's. The make-up and purpose of the Delta Drinking Water Council will be reevaluated along with BDAC when the environmental review process is completed. The need for public advice on Delta drinking water issues will continue throughout implementation of the CALFED Program. The precise forum in which this advice is offered and the structure of the participation shall be determined by CALFED before the conclusion of the environmental review process.

#### Council Membership

Members of the Delta Drinking Water Council, including the Chair, will be appointed by and serve at the pleasure of the BDAC Chair. The BDAC Chair may seek advice from the Council regarding selection of the Council Chair. The Delta Drinking Water Council Chair must exhibit good facilitation and dispute resolution skills. The position may be rotated among members at the discretion of the BDAC Chair. Members are appointed as individuals and as representatives of their respective organizations. The combined membership should possess high level technical and policy expertise. Members (see Attachment 2) represent the following areas:

- Drinking water regulations
- Human health effects (e.g., toxicological, epidemiological)
- Water treatment
- Delta hydrology and water quality
- Water management/operations and water quality modeling
- Water quality monitoring
- Source control

#### **Operating Procedures**

The CALFED Bay-Delta Program will provide staff support for the Council. All meetings of the Council will be public meetings with prior notice of the date, time, location and items to be discussed provided to interested parties. Summary notes of each meeting of the Council will be prepared for distribution to the membership and to others upon request.

#### **Allowances**

Members serve on the Council without compensation for their services. Non-CALFED agency members will be reimbursed for travel, subsistence, and other necessary expenses incurred by them in performing duties consistent with applicable state and federal law.

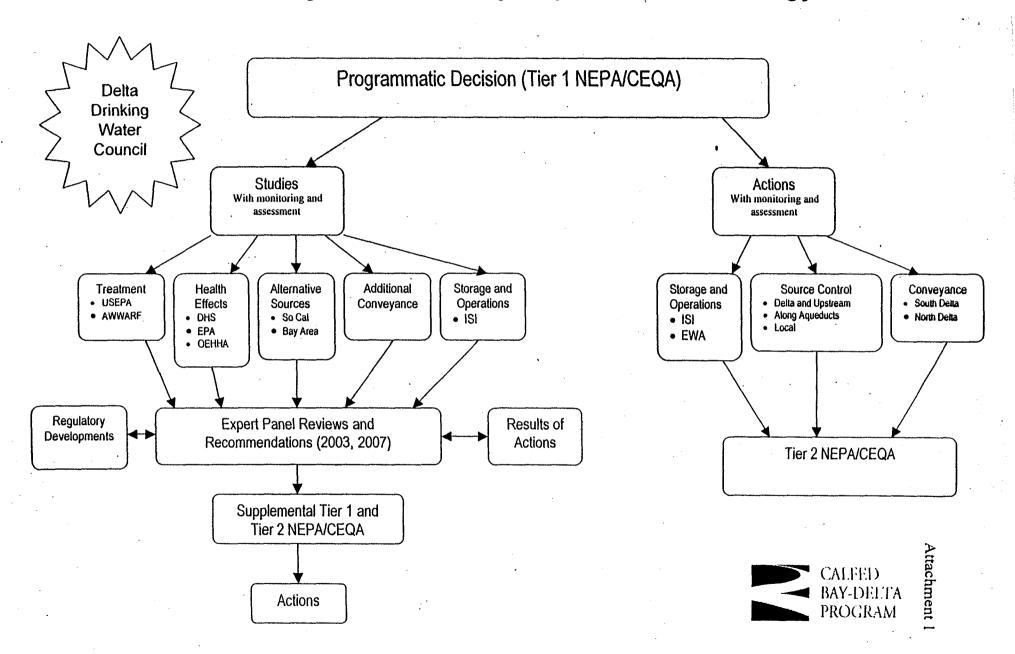
#### Frequency of Meetings

Council meetings are expected to be full day meetings and will likely occur at least monthly. The frequency and duration of the meetings may change as deemed necessary by the BDAC Chair, the Council Chair, and/or the CALFED Program Executive Director.

#### **Decision-Making Protocols**

A majority of the membership of the Delta Drinking Water Council will constitute a quorum for the transaction of business. The Council shall seek consensus support for its advice and recommendations. If consensus cannot be reached, the Council will issue a majority report to BDAC. One or more minority reports also will be issued if the minority so desires.

### **Drinking Water Quality Improvement Strategy**



#### Membership

Walter J. Bishop - Contra Costa Water District

Huali Chai - The Bay Institute

Russell E. Fuller- Antelope Valley East Kern Water Agency

Donald Gauthier - Helix Water District

Bruce Macler, U. S. Environmental Protection Agency

Phillip Metzger - U. S. Environmental Protection Agency, Office of Drinking Water

Dave Okita, Solano County Water Agency

Pankaj Parekh - City of Los Angeles

Timothy H. Quinn - Metropolitan Water District of Southern California

Robert F. Shanks - Sacramento Regional County Sanitation District

Dave Spath - Department of Health Services

Frances Spivy-Weber - Mono Lake Committee (BDAC Member)

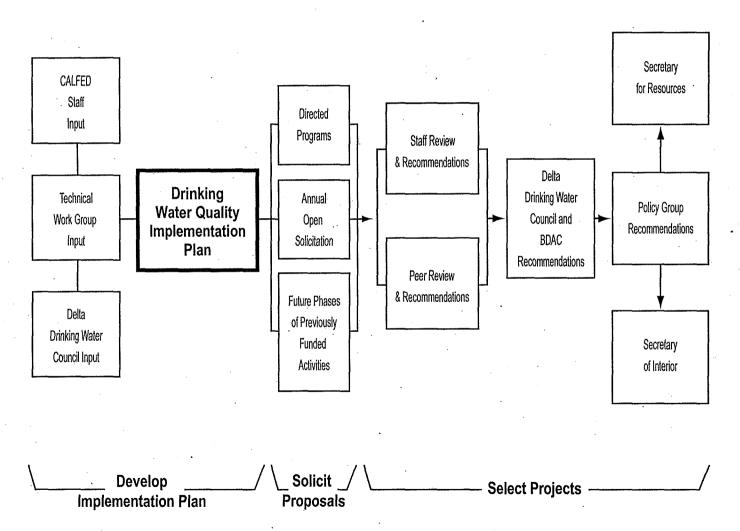
Walt Wadlow - Santa Clara Valley Water District

Marguerite Young - Clean Water Action

Steve Zapoticzny - Southern California Water Committee (BDAC Member)

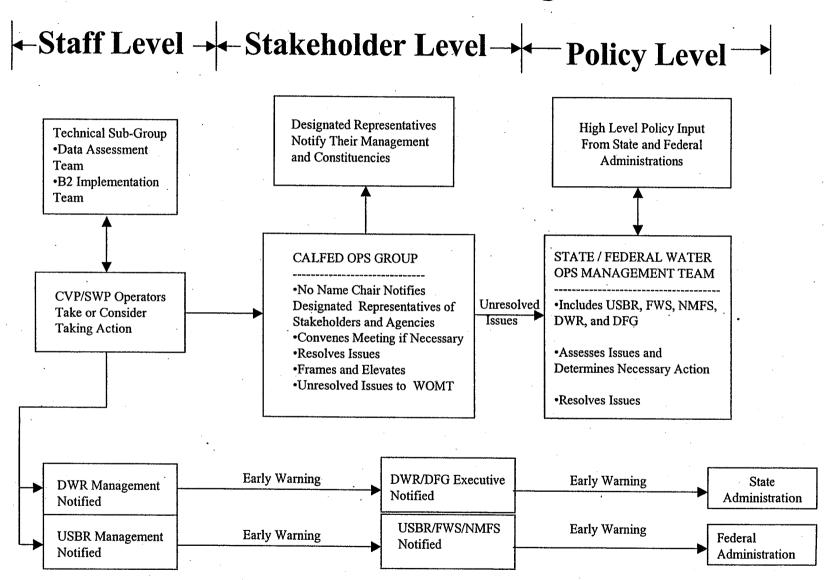
Tomas Zuckerman- Central Delta Water Agency

# Drinking Water Quality Program Proposed Project Selection Process





### **Operations Decision-Making Process**



# CALFED BAY-DELTA PROGRAM DELTA DRINKING WATER COUNCIL MEETING Sign-In Sheet

Resources Building Room 1142

Thursday, December 16, 1999 12:00 noon - 3:30 p.m.

Name	Address/Affiliation	Phone/Fax #	E-Mail
BM Crooks	City of Sacto	916-369-2909	
K.T. Shum	ccw'P	925 688-80 83 Fax 8142	ktshum@ccwater.com
BRIAN CAMPBOLL	EBMUD	510 287-0660	
John Winther	Detta Wet/ads		
Pin Metzger	USERA	760-5700	
Bruce Macher	USEPA	415 744-1884	
PANKAS PAREKY	CITY & LOS ANGELES, DWP	6137 3673191 P(213) 367 3630	pankaj. parekh@ la dwp.com
ROBERT SHANKS	SACROMENTO REGIONAL COUNTY	916-874-8239	

# CALFED BAY-DELTA PROGRAM DELTA DRINKING WATER COUNCIL MEETING

Sign-In Sheet

Resources Building

Room 1142

Thursday, December 16, 1999

12:00 noon - 3:30 p.m.

Name	Address/Affiliation	Phone/Fax #	E-Mail
Huali G. Chai	The Bay Enstitute W 425 East Sauta Classit #202, San Sose 95113	408 297-6770	rawhge aolicon
DAVID OKTIA	SOLAND COMMY WATER AGENCY	707 451 - 2904	dokita e solonobie.net
Marguerite Young	Clean Water Action	415 362 3040	myoung @ Cleanwater.org
Frances Spiny-Weber	Mono Lake Committee	310-316-0041 316-8509(f)	Frances@monolake.org
KerryRae	USBR	(914) 978- 5294	krae@mp.usbr.gov
TOHN DEMARINIS	Big Un Lley RAncherit Clear Lake Ca	707) 263-3924	hij valleye pacitic, net.
Tom Zudeumen	Central DWA	209/943-5431/ Ax 943-0905	
WALLY BISHOP	CCWD	925-488-8034	WOISHOP @ CCWATER. COM

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Sign-In Sheet

Resources Building
Room 1142

Thursday, December 16, 1999 12:00 noon - 3:30 p.m.

Name	Address/Affiliation	Phone/Fax #	E-Mail
TIM QUINN	MWDSC	916-650-2560 444-6887	tquino mud. dst.ca.us
Paul lfr Hm	CALFED		·
JOHN HERRICK	SDWA	(204) 956 0150 (204) 956 0154 Ex	Therrian and com.
Wayne Verrill	DUB 1020 Ninth St. Savarmento, 958/4	916) 327-1667	werrill water, cu, gov
MIKE GILTON	P.O. POX 642 Modesto CA 95353	209 527 5424 209 521-48016.	mgilton@ci.modesto.ca.us
-cren Schwinn	US EFA 75 Hawhorn st(w)	415/744-186	schwar, Korn Qepanger
MILL BOOTS	Son Francisco (A014105	415/744.1967	boots. michael@epa.gov

## CALFED BAY-DELTA PROGRAM DELTA DRINKING WATER COUNCIL MEETING

Sign-In Sheet

Resources Building
Room 1131

Thursday, January 27, 2000 12:00 noon - 3:30 p.m.

Name	Address/Affiliation	Phone/Fax #	E-Mail
Ph. I World	DWR	916-327-1660	pwendtleater. (A. got
BM Crooks	Cuty Sacto 3505 Duet Ct Sacto	916-369-2909	b Crooks@ns.net
DAN PETERSON	DWR Oxm	916 657-9978	danp@water-ca, you
DANIO OKULA	SOLAND COUNTY WATER PURSOS	707 451-294	dokitae solanobizinet
Thil Metiger	Telesofe	rence	
Bruce Macher	USEPA	4157441884)	Macler, bruce Depa, gov
Marquerite Young	Clean Water Action	415 362 3046	myoung@cleanwater.org
Frances Spiny-Welier	Mono Lake Committee	(310) 316-0041	frances@monolake.org

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## DELTA DRINKING WATER COUNCIL MEETING CALFED BAY-DELTA PROGRAM

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Resources Building

Room 1131

Thursday, January 27, 2000

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Resources Building
Room 1131

Thursday, January 27, 2000 12:00 noon - 3:30 p.m.

Name	Address/Affiliation	Phone/Fax #	E-Mail
O. Briggs	CCWD	925658-8073 -8142	dbrigs & cow iter com
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Carl Lischeske	DH5	916-323-3693	clisches@dhs.cq.g.ov
JIM McDANIEL	LA DWP	213 - 307-1050 (p -0038 (f)	James, McDaniel Owater, LADWP. com
MARIAN MOE	Ca. Attorney general's Office	322-5460	
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